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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,086	07/30/2003	Noah Horton	100110404-1	8478

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EXAMINER
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BRAUTIGAM, ALYSA N

ART UNIT	PAPER NUMBER
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2676

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/630,086

**Applicant(s)**

HORTON, NOAH

**Examiner**

Alysa N. Brautigam

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/30/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "156" and "158" in Figure 9 have both been used to designate generalized output devices. Based on the specification (paragraphs 0054-0055), item 156 should remain but be more generally labeled as "output device" and item 158 should be eliminated from the drawing.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:
  - Figure 6, Item 81
  - Figure 7, Item 81
  - Figure 9, Item 158
  - Figure 14, Item 457
  - Figure 15, Item 531 – see page 32, line 5 of the specification where it appears this item should be labeled "551"
3. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures

appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

4. The disclosure is objected to because of the following informalities:
- Paragraph 0031, line 11 – "luminosity value [may] be a value..."
  - Paragraph 0080 – Text accompanying block 275 of Figure 12 should more consistent with the text in the block
  - Paragraph 0091 – Text accompanying block 515 of Figure 15 should more consistent with the text in the block

Appropriate correction is required.

### ***Claim Objections***

5. Claims 1, 5-7, 11-13, and 15 are objected to because of the following informalities: Each of these claims use the term "different" in reference to format; however, the term is vague enough to put the claims in danger of being unclear, i.e., each one of the format-specific editors works on a map of a different format (one editor

to one format) or if any one of the format-specific editors works on a map of a different format (one editor to multiple formats). Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gelb et al. (6,515,674) in view of Malzbender et al. ("Polynomial Texture Map (.ptm) File Format").

8. In regards to claim 1, Gelb discloses a system for editing parametric texture maps (column 2, line 60 through column 3, line 8), comprising:

- a plurality of format-specific editors, each of the format-specific editors configured to perform at least one spatial operation on a parametric texture map (PTM) of a different format editors (column 4, lines 36-39 disclose the plurality of parametric texture map and the associated ability to edit them individually; column 3, lines 56-60 discloses the ptm file containing variables for editing the maps); and
- a PTM editing tool configured to receive a command to perform a spatial operation on a parametric texture map identified by the command (Gelb discloses the ability of the user to define and input data such as would

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compromise an editing tool as broadly as claimed: column 2, line 60 through column 3, line 8; column 4, lines 35-49),

- the PTM editing tool configured to invoke the selected format-specific editor in response to the command (column 4, line 41-43).

While Gelb discloses the ability to read the parametric texture map file, Gelb does not specifically disclose the contents of the file such that it is clear the selection of one of the format-specific editors is based on a format of the identified PTM. Malzbender discloses the details of the file including the ability of the file to determine a format of the particular parametric texture map and to identify which of the format-specific editors, based on the determined format, is compatible with the determined format of the particular parametric texture map (PTM file and its format is the means for determining; Section 2.2 discloses the means for identifying the particular format of the parametric texture map). It would have been obvious to one skilled in the art to which it pertains at the time the invention was made to integrate the teachings of Gelb and Malzbender to achieve a system and method for editing parametric texture maps such that a graphics processor invokes the file containing the data associated with the parametric texture mapping which then provides further means for identification and selection of parametric texture map editing data.

9. In regards to claim 2, the combination of Gelb and Malzbender discloses the system of claim 1, wherein the commanded spatial operation is a rotation of the identified parametric texture map (Gelb: column 8, lines 46-49 disclose the spatial operation as a texture map rotation).

10. In regards to claim 3, the combination of Gelb and Malzbender discloses the system of claim 1, wherein the commanded spatial operation is a resizing of the identified parametric texture map (Malzbender: Section 2.4 discloses scale [resizing]). It would have been obvious to one skilled in the art to which it pertains at the time the invention was made to integrate the teachings of Gelb and Malzbender to achieve a system and method wherein the spatial operation is a texture map rotation in order to create a system having enhanced performance and wherein anisotropic materials are capable of being modeled.

11. In regards to claim 4, the combination of Gelb and Malzbender discloses the system of claim 1, wherein each texel of the identified parametric texture map comprises data defining a luminosity value that is a function of light direction (Gelb: column 2, line 60 through column 3, line 8; column 4, lines 14-22).

12. In regards to claim 5, the combination of Gelb and Malzbender discloses the system of claim 1, wherein each of the format-specific editors is configured to perform a rotation of a parametric texture map of a different format (Gelb: column 8, lines 46-49 disclose the spatial operation as a texture map rotation).

13. In regards to claim 6, the combination of Gelb and Malzbender discloses the system of claim 1, wherein each of the format-specific editors is configured to perform a resizing of a parametric texture map of a different format (Malzbender: Section 2.4 discloses scale [resizing]). It would have been obvious to one skilled in the art to which it pertains at the time the invention was made to integrate the teachings of Gelb and Malzbender to achieve a system and method wherein the spatial operation is a texture

map rotation in order to create a system having enhanced performance and wherein anisotropic materials are capable of being modeled.

14. In regards to claim 7, Gelb discloses a system for editing parametric texture maps, comprising:

- a plurality of format-specific editors (column 4, lines 36-39 disclose the plurality of parametric texture map and the associated ability to edit them individually; column 3, lines 56-60 discloses the ptm file containing variables for editing the maps); and
- a PTM editing tool configured to identify at least one spatial operation to be performed on a particular parametric texture map in order to complete a desired task (Gelb discloses the ability of the user to define and input data such as would comprise an editing tool as broadly as claimed: column 2, line 60 through column 3, line 8; column 4, lines 35-49),
- the PTM editing tool configured to instruct the identified format-specific editor to perform the identified spatial operation on the particular parametric texture map (column 4, line 41-43).

While Gelb discloses the plurality of format-specific editors and that the parametric texture map hold parameters for editing, Gelb does not specifically disclose the values of those parameters such that the PTM editing tool is configured to determine a format of the particular parametric texture map and to identify which of the format-specific editors, based on the determined format, is compatible with the determined format of the particular parametric texture map. Malzbender discloses the details of the file



including the ability of the file to determine a format of the particular parametric texture map and to identify which of the format-specific editors, based on the determined format, is compatible with the determined format of the particular parametric texture map (PTM file and its format is the means for determining; Section 2.2 discloses the means for identifying the particular format of the parametric texture map). It would have been obvious to one skilled in the art to which it pertains at the time the invention was made to integrate the teachings of Gelb and Malzbender to achieve a system and method for editing parametric texture maps such that a graphics processor invokes the file containing the data associated with the parametric texture mapping which then provides further means for identification and selection of parametric texture map editing data.

15. In regards to claim 8, the combination of Gelb and Malzbender discloses the system of claim 7, wherein the identified spatial operation is a rotation of the identified parametric texture map (Gelb: column 8, lines 46-49 disclose the spatial operation as a texture map rotation).

16. In regards to claim 9, the combination of Gelb and Malzbender discloses the system of claim 7, wherein the identified spatial operation is a resizing of the identified parametric texture map (Malzbender: Section 2.4 discloses scale [resizing]). It would have been obvious to one skilled in the art to which it pertains at the time the invention was made to integrate the teachings of Gelb and Malzbender to achieve a system and method wherein the spatial operation is a texture map rotation in order to create a

system having enhanced performance and wherein anisotropic materials are capable of being modeled.

17. In regards to claim 10, the combination of Gelb and Malzbender discloses the system of claim 7, wherein each texel of the identified PTM comprises data defining a luminosity value that is a function of light direction (Gelb: column 2, line 60 through column 3, line 8; column 4, lines 14-22).

18. In regards to claim 11, the combination of Gelb and Malzbender discloses the system of claim 7, wherein each of the format-specific editors is configured to perform a rotation of a parametric texture map of a different format (Gelb: column 8, lines 46-49 disclose the spatial operation as a texture map rotation).

19. In regards to claim 12, the combination of Gelb and Malzbender discloses the system of claim 7, wherein each of the format-specific editors is configured to perform a resizing of a parametric texture map of a different format (Malzbender: Section 2.4 discloses scale [resizing]). It would have been obvious to one skilled in the art to which it pertains at the time the invention was made to integrate the teachings of Gelb and Malzbender to achieve a system and method wherein the spatial operation is a texture map rotation in order to create a system having enhanced performance and wherein anisotropic materials are capable of being modeled.

20. Claims 13 and 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malzbender et al. ("Polynomial Texture Map (.ptm) File Format") in view of Gelb et al. (6,515,674).

21. In regards to claim 13, Malzbender discloses a system for editing parametric texture maps (Section 1.0 Background; in addition, the entire document, both inherently and explicitly, provides the details of a system for editing parametric texture map), comprising:

- means for identifying a spatial operation to be performed on a particular parametric texture map (Sections 2.3 and 2.4 provide details on the means for identifying spatial operations to be performed on a parametric texture map; Section 2.2 discloses the means for identifying the particular format of the parametric texture map upon which the operation is performed);
- means for determining (PTM file and its format is the means for determining) a format of the particular parametric texture map (Section 2.2 discloses the means for identifying the particular format of the parametric texture map);
- means for selecting (Section 2.5 discloses the Lookup Table information as the means for selecting the format-specific editors where the Lookup Table is the editor), based on the determining means (details of the PTM file), one of the format-specific editors (tables which consist of editing information) that is configured to perform the identified spatial operation on a parametric texture map of the determined format; and

While Malzbender discloses the details associated with the means for identifying a spatial operation, determining a format of the parametric texture map, and means for

selecting an editor and Malzbender further discloses wherein the format-specific editor performs the identified spatial operation on the particular parametric texture map (Section 2.5), Malzbender does not specifically disclose a plurality of format-specific editors nor does Malzbender specifically disclose the means for invoking the selected format-specific editor. However, Gelb discloses a plurality of format-specific editors (column 4, lines 36-39 disclose the plurality of parametric texture maps) and Gelb discloses the means for invoking the selected format-specific editor (column 3, lines 50-53 disclose the graphics processor invoking the processing of the parametric texture data). It would have been obvious to one skilled in the art to which it pertains at the time the invention was made to integrate the teachings of Malzbender and Gelb to achieve a system and method for editing parametric texture maps such that a graphics processor invokes the file containing the data associated with the parametric texture mapping which then provides further means for identification and selection of parametric texture map editing data.

22. In regards to claim 15, Malzbender discloses a method for editing parametric texture maps, comprising:

- identifying a spatial operation to be performed on a particular parametric texture map (Sections 2.3 and 2.4 provide details on the means for identifying spatial operations to be performed on a parametric texture map; Section 2.2 discloses the means for identifying the particular format of the parametric texture map upon which the operation is performed);

- determining (PTM file and its format is the means for determining) a format of the particular parametric texture map (Section 2.2 discloses the means for identifying the particular format of the parametric texture map);
- identifying, based on the determining, which of the format-specific editors is compatible with the determined format of the particular parametric texture map (Section 2.2 discloses the means for identifying the particular format of the parametric texture map), each of the format-specific editors configured to perform at least one spatial operation on a parametric texture map (PTM) of a different format; and

While Malzbender discloses the details associated with the means for identifying a spatial operation, determining a format of the parametric texture map, and means for selecting an editor and Malzbender further discloses wherein the format-specific editor performs the identified spatial operation on the particular parametric texture map (Section 2.5), Malzbender does not specifically disclose a plurality of format-specific editors nor does Malzbender specifically disclose the means for invoking the selected format-specific editor. However, Gelb discloses a plurality of format-specific editors (column 4, lines 36-39 disclose the plurality of parametric texture maps) and Gelb discloses the means for invoking the selected format-specific editor (column 3, lines 50-53 disclose the graphics processor invoking the processing of the parametric texture data). It would have been obvious to one skilled in the art to which it pertains at the time the invention was made to integrate the teachings of Malzbender and Gelb to achieve a system and method for editing parametric texture maps such that a graphics

processor invokes the file containing the data associated with the parametric texture mapping which then provides further means for identification and selection of parametric texture map editing data.

23. In regards to claim 16, the combination of Malzbender and Gelb discloses the method of claim 15, wherein each identifying is performed in response to a command that identifies the particular parametric texture map (Gelb: column 4, lines 35-49 disclose the identifying in response to the user-defined vector). It would have been obvious to one skilled in the art to which it pertains at the time the invention was made to integrate the teachings of Malzbender and Gelb to achieve a system and method wherein the identification is done in response to a command in order to create a system having enhanced performance.

24. In regards to claim 17, the combination of Malzbender and Gelb discloses the method of claim 15, wherein the identified spatial operation is a texture map rotation (Gelb: column 8, lines 46-49 disclose the spatial operation as a texture map rotation). It would have been obvious to one skilled in the art to which it pertains at the time the invention was made to integrate the teachings of Malzbender and Gelb to achieve a system and method wherein the spatial operation is a texture map rotation in order to create a system having enhanced performance and wherein anisotropic materials are capable of being modeled.

25. In regards to claim 18, the combination of Malzbender and Gelb discloses the method of claim 15, wherein the identified spatial operation is a texture map resizing (Malzbender: Section 2.4 discloses scale [resizing]).

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26. In regards to claim 19, the combination of Malzbender and Gelb discloses the method of claim 15, wherein each texel of the particular parametric texture map comprises data defining a luminosity value that is a function of light direction (Malzbender: Section 1.0 and Gelb: column 2, line 60 through column 3, line 8).

27. In regards to claim 20, Malzbender discloses a texture editing method, comprising:

- identifying, based on the commands, spatial operations to be performed on the parametric texture maps (Sections 2.3 and 2.4 provide details on the means for identifying spatial operations to be performed on a parametric texture map; Section 2.2 discloses the means for identifying the particular format of the parametric texture map upon which the operation is performed);
- identifying a format of each of the parametric texture maps (PTM file and its format is the means for determining; Section 2.2 discloses the means for identifying the particular format of the parametric texture map);
- determining, for each of the identified spatial operations, which of a plurality of format-specific editors is compatible with the determined format of the parametric texture map on which the identified spatial operation is to be performed (Section 2.2 discloses the means for identifying the particular format of the parametric texture map).

While Malzbender discloses the details associated with the means for identifying a spatial operation, determining a format of the parametric texture map, and means for

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selecting an editor and Malzbender further discloses wherein the format-specific editor performs the identified spatial operation on the particular parametric texture map (Section 2.5), Malzbender does not specifically disclose a plurality of format-specific editors nor does Malzbender specifically disclose the means for invoking the selected format-specific editor. However, Gelb discloses a plurality of format-specific editors (column 4, lines 36-39 disclose the plurality of parametric texture maps) and Gelb discloses the means for invoking the selected format-specific editor (column 3, lines 50-53 disclose the graphics processor invoking the processing of the parametric texture data). It would have been obvious to one skilled in the art to which it pertains at the time the invention was made to integrate the teachings of Malzbender and Gelb to achieve a system and method for editing parametric texture maps such that a graphics processor invokes the file containing the data associated with the parametric texture mapping which then provides further means for identification and selection of parametric texture map editing data.

28. In regards to claim 21, the combination of Malzbender and Gelb discloses the method of claim 20, wherein the spatial operations include texture map rotations (Gelb: column 8, lines 46-49 disclose the spatial operation as a texture map rotation) and texture map resizing (Malzbender: Section 2.4 discloses scale [resizing]). It would have been obvious to one skilled in the art to which it pertains at the time the invention was made to integrate the teachings of Malzbender and Gelb to achieve a system and method wherein the spatial operations are texture map rotation and resizing in order to



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create a system having enhanced performance and wherein anisotropic materials are capable of being modeled.

29. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Malzbender et al. (Polynomial Texture Map (.ptm) File Format).

30. In regards to claim 14, Malzbender discloses a computer-readable medium having logic (Sections 1.0 and 2.0 disclose the background and format of the files where it is inherent that computer files are stored on computer-readable medium having a program), the system comprising:

- logic for receiving commands for editing parametric texture maps identified by the commands (Section 2.9 where the field in the file format is the logic);
- logic for identifying, based on the commands, spatial operations to be performed on the parametric texture maps (Section 2.9 where the field in the file format is the logic);
- logic for determining a format of each of the parametric texture maps (Section 2.2 where the field in the file format is the logic); and
- logic for selecting different format-specific editors for performing the spatial operations, wherein the selecting logic, for each of the identified spatial operations, is configured to determine which of the format-specific editors is compatible with the determined format of the parametric texture map on which the identified spatial operation is to be performed and to

instruct the compatible format-specific editor to perform the identified spatial operation (Section 2.5 discloses the logic for selecting the different format-specific editors [tables] where the file would contain the necessary logic to determine which of the format-specific editors is compatible with the determined format of the parametric texture map and instruct the compatible format-specific editor to perform the identified spatial operation).

While Malzbender discloses the logic in the form of data contained in the file of this format, Malzbender does not explicitly disclose wherein the computer-readable medium has a program. However, it is common practice for computer files to be utilized by computer programs. Therefore, it would have been obvious to one skilled in the art to which it pertains at the time the invention was made to integrate the teachings of Malzbender with what is commonly known in the art to achieve a system and method wherein a computer-readable medium contains a program having logic as this is the commonly accepted practice for utilizing and functionalizing computer systems.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alysa N. Brautigam whose telephone number is 571-272-7780. The examiner can normally be reached on 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

anb



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